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Supreme Court of the United States

OCTOBER TERM, 1949.

No. 206.

RADCLIFFE MORRIS URQUHART and GEORGE G. URQUHART,
Petitioners,

v.

PYRENE MANUFACTURING COMPANY, *Respondent.*

PETITIONER'S REPLY BRIEF ON PETITION FOR WRIT OF CERTIORARI TO THE CIRCUIT COURT OF APPEALS FOR THE THIRD CIRCUIT.

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Introduction

Petitioners are reluctant to burden the Court with a reply brief since they feel their petition and supporting brief clearly justify the grant of the requested writ. However, from a careful analysis of the opinions of the Courts below, it is quite apparent that neither the District Court nor the Court of Appeals clearly understood the position and claim of invention of petitioners. Respondent's brief here is calculated to mislead this Court just as the lower Courts were misled. Respondent's brief here contains misrepresentations, half-truths, and assertions beyond the scope of the record evidence. They are similar to those made to the

Courts below and they are intended to obscure the simple issue or claim of invention made in this case.

We strongly feel that had the Courts below truly understood the record in this case and the position of petitioners, they could not have arrived at the conclusion they did, namely, that petitioners did not invent anything even though admittedly they devised a practical and workable method for making mechanical foam and substantially advanced the art of making mechanical fire foam. For this reason and to avoid the possibility of a misunderstanding on this petition, petitioners will endeavor to again explain, in simple terms or layman's language, petitioners invention and position and will point out what appears to them to be the major unwarranted and unjustified assertions in respondents' brief that are designed to bring about confusion of the issues.

The Prior Art and Petitioners' Invention and Position on Patentability

Prior to 1929, chemical foam was well known and widely used and efforts were being made, both in this country and in Europe, to develop a commercially acceptable mechanical foam (R. 39a, 392a, 421a to 438a, 446a, 501a, 505a) and thereby avoid the objections and expense inherent in the making of chemical foam (R. 29a, 30a, 34a, 35a, 122a, 225a). In Germany in 1923, Clemens Wagener applied for a patent on a method for producing foam, which patent was granted in 1931. Wagener's method as disclosed by his patent contemplated nothing more than a straight stream of water through a nozzle, without any interruption to the flow (R. 398a, 399a) for simultaneously incorporating and mixing the water stream, a saponin stabilizer, and air. This method was never exploited nor was it successful or used commercially (R. 97a).

In 1932 the Urquharts, after demonstrating the practicability of their claimed method and proposed commercial apparatus, filed their application disclosing the method and

apparatus here in suit, very different from the Wagener method. Their method contemplated introducing a stabilizing liquid into a stream of water at one point and then introducing into the resulting stream of water and stabilizing liquid, at another point, air, or some other gas. It is at this latter point that the Urquharts' device deviated from the entire theory of the Wagener patent, in that they conceived the idea that an interruption of the forward flow of the stream of water and stabilizing fluid at the point of contact with the air or gas was necessary to make fire foam. Therefore, in their patent they suggested ways and means of "dispersing" the stream at the latter point to give the flow "turbulence" yet maintaining adequate forward energy to project or throw the foam from the nozzle. This simply means that they invented a new method of making foam by beating up in some way the mixture of water, stabilizer and air at the point of introduction of the air before letting it leave the nozzle.

The reason for avoidance of the Urquharts' proposed interruption of the forward flow of the stream by their predecessors using jet pumps was the recognized need to maintain an uninterrupted stream of water so as to preserve the forward velocity of the stream and use it to assure the projection or throw of the discharge from the nozzle, well beyond the end of the nozzle. The necessity of this projection or throw is readily apparent since without it the fireman would have to expose himself to the heat or flame to apply the discharge, whether water or foam, from the nozzle onto the fire. The fact that an interruption of the forward flow of a stream through a nozzle would seriously decrease this projection or flow is known to everyone from their own experience with the ordinary garden hose, where the manipulation of the discharge nozzle to produce a spray discharge materially restricts the extent of projection or throw of the water beyond the nozzle. The members of this Court will take judicial knowledge of this truth.

In spite of this general knowledge, the Urquharts told the fire fighting art that it was necessary to interrupt the forward flow of the water and stabilizer stream by purposely creating a dispersion or turbulent flow in the stream at the point of contact with the air in order to produce satisfactory fire foam yet maintain a satisfactory projection or throw. No one prior to the Urquharts taught this, not even Clemens Wagener or his patents (R. 398a, 399a). That this teaching is a necessary and critical step in production of commercially satisfactory fire foam is amply shown by this record (R. 48a, 55a, 132a, 164a, 401a). Pyrene itself admits it to be so (R. 97a). The evidence shows the necessary dispersion or turbulence can be obtained by use of various forms of apparatus (R. 55a, 56a, 132a, 160a, 163a, Exhibit D-6, R. 469a). The pump engineers when given the Urquharts' requirements, namely, turbulence plus as much forward throw as possible devised a special device which they called a "Mechanical Foam Machine" (R. 592a). This device was produced and supplied to the Urquharts in 1932 by Schuette & Koerting pursuant to the Urquharts' specifications (R. 603a to 607a, 620a to 623a). These last record references show that the Urquharts' requirements of dispersion or turbulence and throw necessitated modification of the conventional jet pumps, suggested by Wagener. His method contemplated employment of solid stream jet pumps used to maintain the forward flow energy to exhaust air and pull a high vacuum (R. 246a, 571a, 581a, 623a). His method also contemplated dispersed stream jet condensers which utilized this forward flow energy to create a dispersed stream to condense steam and wash air without projection or throw of the liquid beyond the end of the nozzle (R. 237a, 238a, 239a, 569a, 570a, 574a, 582a, 622a, 623a, 693a, 694a). In such condensers the water could be seen just "falling out the end" (R. 706a).

Respondent's brief (pages 8 and 9), as did its arguments below, attempts to confuse the issues by reading into the Urquhart method teaching the simple commercial apparatus by which the Urquharts suggested their method could

be most conveniently practiced. Respondent's brief represents the Urquharts' position to be that the making of good foam requires use of a spiral or baffle to obtain the dispersion or turbulence. It then makes it appear, as the Courts below were led to believe (R. 400a, 798), that the Urquhart specification actually characterized, dispersion or turbulence at the moment of contact with the gas or air, as an "action not absolutely necessary for the present invention" but one which is "advantageous." Nothing is further from the truth or more contrary to the Urquharts' patents and this record.

Turbulence plus adequate throw is always and admittedly necessary for the making of good fire foam. The type of apparatus used to create the turbulence is optional. The Urquharts suggested a means for the creation of turbulence but said in their application that the use of that particular apparatus was not absolutely necessary but was "advantageous." That apparatus had worked satisfactorily in the Urquhart experiments.

The Method Teaching of The Urquhart Patent. The Urquhart fire foam method is accurately defined in its simplest form in claim 13 of patent No. 2,106,043 (R. 416a) and claim 1 of patent No. 2,198,585 (R. 418a). The critical factor or method step is, "dispersion" or "turbulence at the point of contact of the solution stream and the air or gas" (R. 48a, 55a, 132a, 164a, 401a). The Urquhart method claims are submitted to be patentable under every known test used by the Patent Office and the Courts because of this critical step in the method and irrespective of the means or apparatus used to create the necessary turbulence or dispersion.

The District Court found as a fact that the teaching of the necessity of dispersion or turbulence to make fire foam is nowhere suggested by Wagener's patents (R. 398a, 399a). It, furthermore, is nowhere suggested in the jet pump art that dispersion or turbulence of a liquid at the point of

contact with air, gas, or another liquid would be useful to produce a foam mass or mix the air and water with anything (R. 243a). This fact cannot be disputed and neither the Court below nor Pyrene disputes it.

It is submitted, therefore, that this method teaching claimed by the Urquharts' is novel and stands alone and apart from any apparatus considerations and that the Courts below erred in holding that it was not patentable.

The descriptive basis for this critical feature of the Urquharts' method claims are the words "will cause turbulent flow of the mixture and insure good contact with the gas, which is injected through pipe 14." (R. 414a, col. 2, lines 24 to 26 of patent 2,106,043 and R. 419a, col. 2, lines 25 to 27 of patent 2,198,585). Nowhere does the Urquhart specification even inferentially suggest that this action, dispersion or turbulence at the point of contact with the air or gas, is not absolutely necessary. On the contrary the patents emphasize and everyone familiar with the art, acknowledges the necessity of such turbulence or dispersion. The Patent Office recognized the uniqueness and complete departure of this teaching from accepted jet pump method teachings. (Exhibit P. 3-A, not printed, page 103). Pyrene's jet pump witness Ketterer also recognized the revolutionary impact of this teaching in the jet pump art when he said "* * * Urquhart's idea was new to me and appeared to have such merit that it was worth my while to give considerable time designing a modification * * * to meet his specifications." (R. 621a).

Pyrene itself, despite its ownership of the Wagener* patents and its contrary contentions throughout this case became painfully aware, about 1933 or 1934, that this teaching was the essence of practical and successful mechanical or air foam (Exh. D-4-E, R. 450a, Exh. D-4-F, R. 452a, Exh. D-4-G, R. 455a). Not only was Pyrene made aware of this teaching but it took licenses under the asserted Frederich method disclosing the teaching, in both Great

* Wagener was the Patent Attorney for Pyrene's German affiliate (R. 94a).

Britain (Exh. D-4-H, R. 457a) and the United States (Exh. D-4-N, R. 459a) and paid out a substantial sum of money for those licenses. The Frederich invention admittedly contemplates the same method of making fire foam as does the Urquharts.

This is, of course, a technical case. Yet, an analysis of the record will clearly establish that an employee of the respondent, named Timpson (R. 103a), filed an application for a patent on a foam making device in 1934, in which he adopted the invention of petitioners, namely, the creation of turbulence in the foam forming chamber (Exhibit P-3-a, not printed, pages 44 to 50). The application for this patent was prepared by one of the members of the patent law firm that has represented respondents throughout this case. This patent application, now patent 2,057,218 referred to in the record here (R. 488a), confirms clearly and unequivocably petitioners' contentions with respect to the patentability of the method here in litigation. The application for this patent was found by the Patent Office to be claiming the same invention as that of the Urquharts, and also that of Dr. Frederich, of Germany. Interference proceedings No. 70802 were instituted and the interfering method claims in the Timpson application were cancelled. Respondents, realizing the advantages of the method and the hopelessness of their position based on the Timpson application in view of the earlier invention by the Urquharts, and realizing further that Dr. Frederich's work in Germany might be of aid to them in the priority contest, sought and obtained an exclusive license under the Frederich United States application. They cancelled their license only after the Urquharts had been held by the Patent Office to be ahead of Frederich and by the District of Columbia Court entitled to a patent over Frederich's claim that the Urquharts' application did not disclose the claimed invention.

We submit, therefore, that Pyrene's entire position in this case and defense in this suit is inconsistent with every action taken by it prior to the institution of this litigation.

Respondent's brief (pages 9 to 11), as do the Courts' opinions below (R. 399a, 401a, 796, 798, 799), assert lack of patentability of the method on the teachings of the Wagener patents, the McNulty testimony (R. 264a to 279a), and the Pyrene ex parte tests in this litigation (R. 281a to 288a, 291a to 293a). This view, we submit, is contrary to the record and resulted because the Courts were misled.

The rules of this court provide that a writ of certiorari may be granted if the lower court "has so far departed from the accepted and usual course of judicial proceedings, or so far sanctioned such a departure by a lower court, as to call for an exercise of this court's power of supervision." There has been such a departure in this case. Respondent's defense to this suit is contrary to its original contentions and the true facts, and depended for success on confusing the issues and the courts. That it succeeded is amply shown by the progress of the case below, namely, the withdrawal of the Circuit Court's original opinion and the filing of a new opinion.

The Conflict of Opinion

Pyrene's argument (brief 5 to 7) overlooks the fact that the refusal of the Patent Office to allow application claim 28 (claim 1 of patent 2198585) was that it had "* * * no proper basis in the disclosure and in view of the Board's decision, * * *" (Plaintiff's Exhibits P-3-a, not printed, page 103, and P-3-b, not printed, pages 213 and 266). In view of this general rejection, the District of Columbia Court received evidence as to the portions of the specification disclosing each step of the claim, including the critical step of "imparting a high degree of turbulence to the body of said stream of liquid" (R. 578a, 580a). The District of Columbia Court then held "* * * the disclosure supported claim 28 and that the Patent Office erred in rejecting it." (R. 497a, 499a). It found facts based upon its understanding of the evidence on "throw" (R. 498a)

directly involved in the controverted holding of the Courts' below as to the teaching or lack of teaching of the necessity of turbulence. We submit, therefore, that the sufficiency of the specification to support this critical method step was before the District of Columbia Court, that evidence was submitted on this question, and that the District of Columbia Court decided this question as well as the question of use of atmospheric air in favor of the Urquharts and contrary to the Courts below.

There is, therefore, presented to this Court a case in which the United States Patent Office had for consideration a patent application covering an alleged new method for making mechanical fire foam. After a hearing the Board of Appeals of the Patent Office held that the Urquharts' claims with respect to a new method of making mechanical foam were not patentable. An appeal was taken from the Patent Office to the United States District Court for the District of Columbia. After a full hearing that Court found as a fact and concluded as a matter of law that the Urquharts had invented something and were entitled to a patent on that invention. They had invented a new method of making mechanical foam.

Respondent, the Pyrene Company, a large manufacturer and somewhat of a pioneer in the commercialization of mechanical foam (R. 403a) spent money to secure a license under the identical Frederich invention, through one of its employees (Timpson) filed a patent application claiming the identical invention (Exhibit P-3-a, pages 44-50 not printed), and then after a patent was granted to the Urquharts, which made valueless their license agreement, and after avoiding a hopeless priority contest on the Timpson application, making it impossible for the Patent Office to grant a patent to Timpson, it then attacked the validity of the patents issued to the Urquharts. Its position here is predicated on its own Wagener patent rights possessed during the entire time it was making its efforts to patent

the Urquharts' method. The Courts below found in effect that the Urquharts' method had been of material assistance to the Pyrene Company in its commercialization of mechanical fire foam, that it had contributed substantially to the art of making fire foam, and that the Pyrene Company was guilty of infringing upon the Urquharts' method of making fire foam if that method was patentable. Yet it found that the Urquharts were not entitled to the protection of their patent. These Courts completely ignored the decision of the District Court of the District of Columbia, which Court held the Urquharts were entitled to a patent because they had invented something.

If there ever was a case in which there was a conflict of opinions this is it. It is extremely important that this Court determine the questions raised in this litigation so that, in event the Urquharts should file other infringement suits in other jurisdictions, the Courts in those jurisdictions should know whether they should follow the District Court of the District of Columbia or the Courts of the Third Circuit.

The Remaining Pyrene Arguments

Insofar as the remainder of Pyrene's brief in opposition to certiorari is concerned, it is felt that petitioner's main brief is a sufficient answer. Accordingly, no attempt will be made here to answer any other matter although it is noted that Pyrene's brief at pages 14 and 16 misrepresents petitioners' position respecting points 4, 5 and 6 of their petition.

Conclusion

It is respectfully submitted that if the writ of certiorari in this case is granted, petitioners can establish beyond peradventure of doubt that the courts below were in error in holding that petitioners' method of making fire foam was not patentable, and further, that the courts below predi-

cated their decisions upon a misconception of petitioners' claim, and confusion between the method for making fire foam developed by petitioners and the apparatus suggested for utilizing that method.

Respectfully submitted,

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